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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/712,848

11/13/2003

Fabio DeSisti

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EXAMINER

A, MINH D

ART UNIT

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2821

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12/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/712,848	Applicant(s) DESISTI ET AL.	
	Examiner MINH D. A	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on filed RCE on 9/8/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,9,10 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/2/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a response to continued examination under 37 CFR 1.114 filed on September 08, 2008. Examiner Minh has been taken over the instant application "10/712,848" from Examiner Thuy Tran since he is no longer examining in this art.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/8/08 has been entered.
2. In virtue of this RCE, claims 4-5, 8, 11-14 and 16 have been canceled; and thus, claims 1-3, 6-7, 9-10, 15 are now presented in the instant application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, the phrase "Device for switching on and powering discharge lamps according to claim 8, characterized in that said at least one transformer comprised of a toroidal core allows a reduction of dimensions, promoting a reducing

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assembling" renders the claim indefinite because claim 8 has been cancelled, therefore, it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-3, 6-7, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA Figs. 1-2 in view of Pace et al. (U.S. Patent No. 6,271,629 B; hereinafter "Pace") and further in view of Nilssen (U.S. Patent No. 6,211,062).

Regarding claims 1 and 15, AAPA Figs. 1-2 shows a device for switching on and powering discharge lamps comprising a current limiting device [9], a square wave

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generator (not shown; see specification; page 6, lines 6-7), an igniter [11], two high tension connection cables [15], a lamp holder [16] with a discharge lamp coupled (thereto); said igniter comprises a high tension transformer [12] and overlapping transformers [13, 14]; said device being characterized in that said igniter is divided into a first stage of the igniter, or pulse generator transformer, and the high tension transformer [12], and in that said first igniter stage **including the pulse generator and overlapping transformer (13, 14) (see specification, page 6, lines 5-7, a relay (10) controlled by a pulse generator(not shown in figure and overlapping (13,14) shown in page 6, lines 11-12)**, or pulse generator transformer, and the high tension transformer [12] are assembled along with the above mentioned components, wherein said at least current limiting device module [9] is connected by two reduced section cables [OUT1, OUT2] to said first stage of the igniter, or pulse generator transformer, and further wherein said current limiting device module [9] and said first stage of the igniter, or pulse generator transformer, are subjected to movement and/or traction (since connection is made with cables [OUT1, OUT2]. AAPA Fig. 2 shows that the device further comprises a lamp holder [16] having a bottom.

AAPA Figs. 1-2, however, do not apparently show that the first igniter stage be integral with or fixed on said bottom of said lamp holder and the pulse generator and overlapping transformer being integral with the bottom of the lamp holder.

Pace discloses, in Fig. 2, a device for switching on and powering a discharge lamp [20] comprising a lamp holder [28a, 28b, 28c] having a bottom integral with, or

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fixed on, an igniter [60] (regarding "lamp holder", see col. 4, lines 8-9; regarding "igniter, lamp holder integral", see col. 5, lines 39-42 and 51-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of AAPA Figs. 1-2 by integrating the lamp holder bottom with the igniter, or fixing the lamp holder bottom on the igniter, as taught by Pace (or the first igniter stage as claimed) for convenience in use since Pace teaches that such integration of parts would provide an overall compact size (see col. 1, line 8).

Combination AAPA and Pace do not disclose that, **(i) the pulse generator and overlapping transformer being integral with the bottom of the lamp holder and (ii) wherein the transformers are toroidal core transformer.**

(i), the difference is not of patentable merit, since only difference a position for install or integral the pulse generator and the overlapping transformer in bottom lamp holder, since it is not provide any difference between the bottom of the lamp holder and the bottom of the lamp holder of AAPA (see figure 2, igniter (11) and the both overlapping transformer (13-14).

Therefore, Selecting the **pulse generator and overlapping transformers in integral with the bottom of the lamp holder(16) of AAPA** is base upon the design constraints imposed by the device in which the pulse generator and overlapping transformer in integral with the bottom of the lamp holder designed to be used in. It would have been obvious to one ordinary skill in the art at the time the invention was made to have selected the pulse generator and the overlapping transformers of AAPA

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and Pace to incorporate the specific the pulse generator and the overlapping transformer based upon such design constrains for a desired application or environment of use would have been deemed obvious to a person skilled in the art.

Both AAPA and Pace do not obviously disclose that, ii) wherein the transformers are toroidal core transformer.

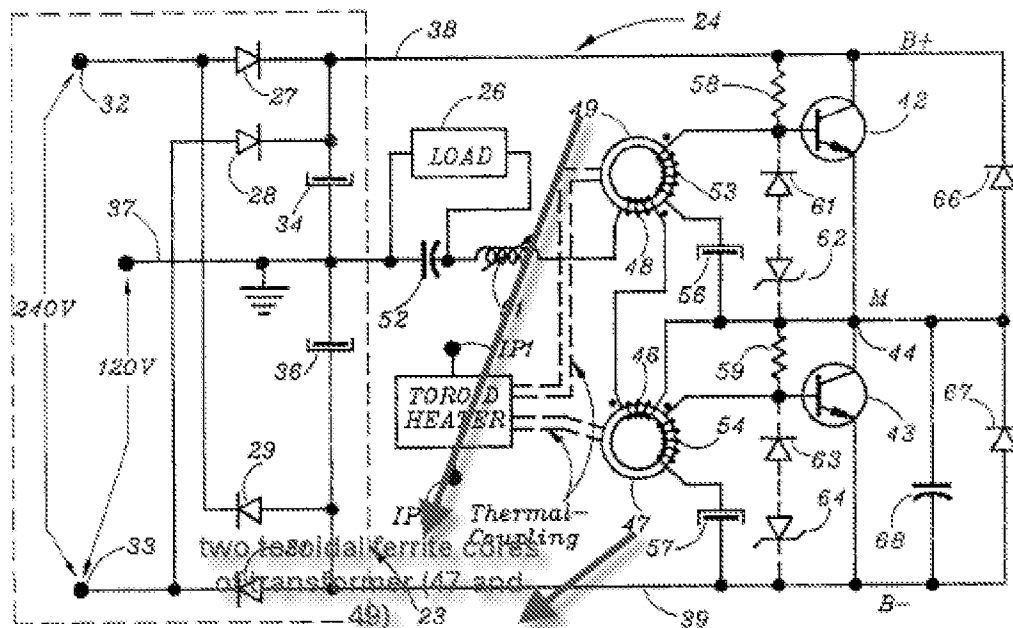


Fig. 2

However, providing the transformers being toroidal core transformer is well known in the art (see figure 2 above of Nissen, col.8, lines 18-20).

It would have been obvious to one having ordinary skill in the art to employ the transformers of Nissen in the power discharge lamps of AAPA and pace to achieve the claimed invention. As disclosed in the electronic ballast of Nilseen, the motivation for the combination would be to provide a high voltage output to external lamp.

Regarding claim 2, the combination of AAPA Figs. 1-2, Pace and Nilssen obviously disclose that the first stage of the igniter, or pulse generator transformer, is integral with the lamp holder such that the first stage of the igniter, or pulse generator transformer slides with said lamp holder (as a result of the modification made in claim 1).

Regarding claim 3, the combination of AAPA Figs. 1-2, Pace and Nilssen obviously disclose that the first stage of the igniter, or pulse generator transformer, integrally moves along with the lamp holder (as a result of the modification made in claim 1).

Regarding claim 6, the combination of AAPA Figs. 1-2, Pace and Nilssen disclose that the first stage of the igniter, or pulse generator transformer, comprises a transformer [13, 14] (see AAPA Fig. 2).

Regarding claim 7, the combination of AAPA Figs. 1-2, Pace and Nilssen disclose that the first stage of the igniter, or pulse generator transformer, comprises two transformers [13, 14] (see AAPA Figs. 1-2).

6. Claims 8-10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA Figs. 1-2 in view of Pace and Nilssen as applied to claims 1, 6-7, and 15 above, and further in view of Elliott (U.S. Patent No. 4,414,491).

Regarding claims 9-10, the combination of AAPA Figs. 1-2, Pace and Nilssen obviously disclose all of the claimed subject matter, as expressly recited in claims 1, 6-7, and 15, except for particularly point out that, each of the transformers being

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comprised of two toroidal nuclei and wherein the at least one transformer having a toroidal core for allowing a reduction of dimension, promoting a reducing assembling.

Elliott discloses, in Fig. 1, a transformer being comprised of a toroidal core [33] and a reduction of the net flux when increasing the load current as shown in col.3, lines 28-35.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the device of the combination of AAPA Figs. 1-2 and Pace and Nilsen with the transformers individually configured with a toroidal core so as to obtain a reduction of the net flux when increasing the load current and that of size or dimensions since such arrangement of the transformers with toroidal cores for the stated purpose has been well known in the art as evidenced by the teachings of Elliott (see col. 3, lines 28-31).

Response to Arguments

7. Applicant's arguments with respect to claims 1-3, 6-10 and 15 have been considered but are moot in view of the new ground(s) of rejection.

In response to Applicants' arguments on the amended independent claims 1 and 15 at page 6, lines 3-7 with respect to the teaching of AAPA Figs. 1-2 in regard to "the pulse generator (112) and two transformer (114 and 115) are fixed underneath the lamp holder and the use of the toroidal core transformers are also not shown in combination with applicant's invention wherein the pulse generator including the first stage of the igniter or pulse transformer is located on the bottom of the lamp holder" , it has been acknowledged that the teaching of AAPA Figs. 1-2 lacks such limitations but Pace and

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Nilssen have been recited to remedy such deficiency. Details were provided above in "Claim Rejections - 35 USC § 103" section above.

In response to Applicants' arguments on the rejections of claims 9-10 and 16 at pages 7- 8, it is acknowledged that the teachings of the combination of AAPA Figs. 1-2 ,Pace and Nilssen lack the use of toroidal core transformers for reduction of dimension, promoting a reducing assembly, but Elliott's has been recited to remedy such deficiency.

Details were provided above in "Claim Rejections - 35 USC § 103" section above. For the aforementioned:

- Claims 1-3, 6-7, and 15 are now rejected as being unpatentable over the combined teachings of AAPA Figs. 1-2 , and Pace and Nilssen; and
- Claims 9-10 are now rejected as being unpatentable over the combined teachings of AAPA Figs. 1-2, Pace, Nilssen and Elliott.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2: 45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Owens Douglas W can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Minh A

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Date 11/22/08

/Douglas W Owens/
Supervisory Patent Examiner, Art Unit 2821
November 24, 2008